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| APPLICATION NO.             | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 10/781,203                  | 02/18/2004  | Hirokazu Yamasaki    | MAT-8507US          | 1945             |
| 23122                       | 7590        | 03/25/2005           | EXAMINER            |                  |
| RATNERPRESTIA               |             |                      | LEYKIN, RITA        |                  |
| P O BOX 980                 |             |                      | ART UNIT            | PAPER NUMBER     |
| VALLEY FORGE, PA 19482-0980 |             |                      | 2837                |                  |

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/781,203 | <b>Applicant(s)</b><br>YAMASAKI ET AL. |  |
|                              | <b>Examiner</b><br>Rita Leykin       | <b>Art Unit</b><br>2837                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-53 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/18/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Katagiri et al. U S # 5,815,089.

Katagiri et al. disclose a device for transmitting signals from brushless motor 1 via position detector. In Fig. 1 and 2 Katagiri et al. show:

- An encoder 4 for detecting position data, including Hall device 4a that is enclosed in the case 44;
- A signal processor circuit 17 that is composed of waveform shaping circuit 4c;
- A power supply 18, 19;
- Signal processing bus lines 10 and 11;
- Transmitter is presented in form of line driver 8;
- A counter 5, parallel to serial converter 6 for converting received position signal into serial signal;

- The claimed sensing device interface presented in form of signals Ao, Bo, Uo, Vo, Wo, Z;

The above components read on applicants position sensing device, (see column 4, lines 45-67 and column 5, lines 1-35)

With respect to the claimed driver, the presence of power supply to the motor driver as well as driver itself are inherent to brushless motor control circuits.

Katagiri et al. teaching shows in Fig. 2:

- A control unit 16 coupled with encoder processing circuit 17 via signal interface busses 10, 11 and power/ground connection 12, 13;
- A receiver 14 between power/serial signal line and second end of wiring section;
- A serial-to-parallel converter 15 provided with serial signal 30 so that position data for phases z, u, v and w and counter value will be delivered in a parallel manner from the converter 15. Wherein the control unit is connected to the motor via motor cable 31 so that motor can be driven with the control unit 16 (see Fig. 1 and column 5, lines 31-42);
- With respect to the claimed power switching circuit for switching phase excitation this limitation is inherent to brushless motor control systems.

***Allowable Subject Matter***

3. Claims 2-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter. The prior art made of record in the attached form PTO-892 considered to be pertinent to the submitted application.

However, none of the prior art teaches or suggests the claimed combination of motor control limitations with superposed wave transmitter that includes a sensing device transformer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571)272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Leykin  
Primary Examiner  
Art Unit 2837

A handwritten signature in black ink, appearing to read "Rita Leykin", written in a cursive style.

R.L.